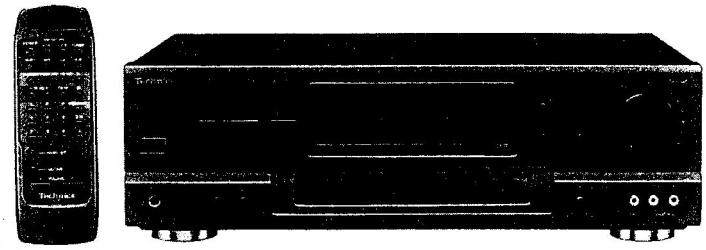
Technics

AV control stereo receiver

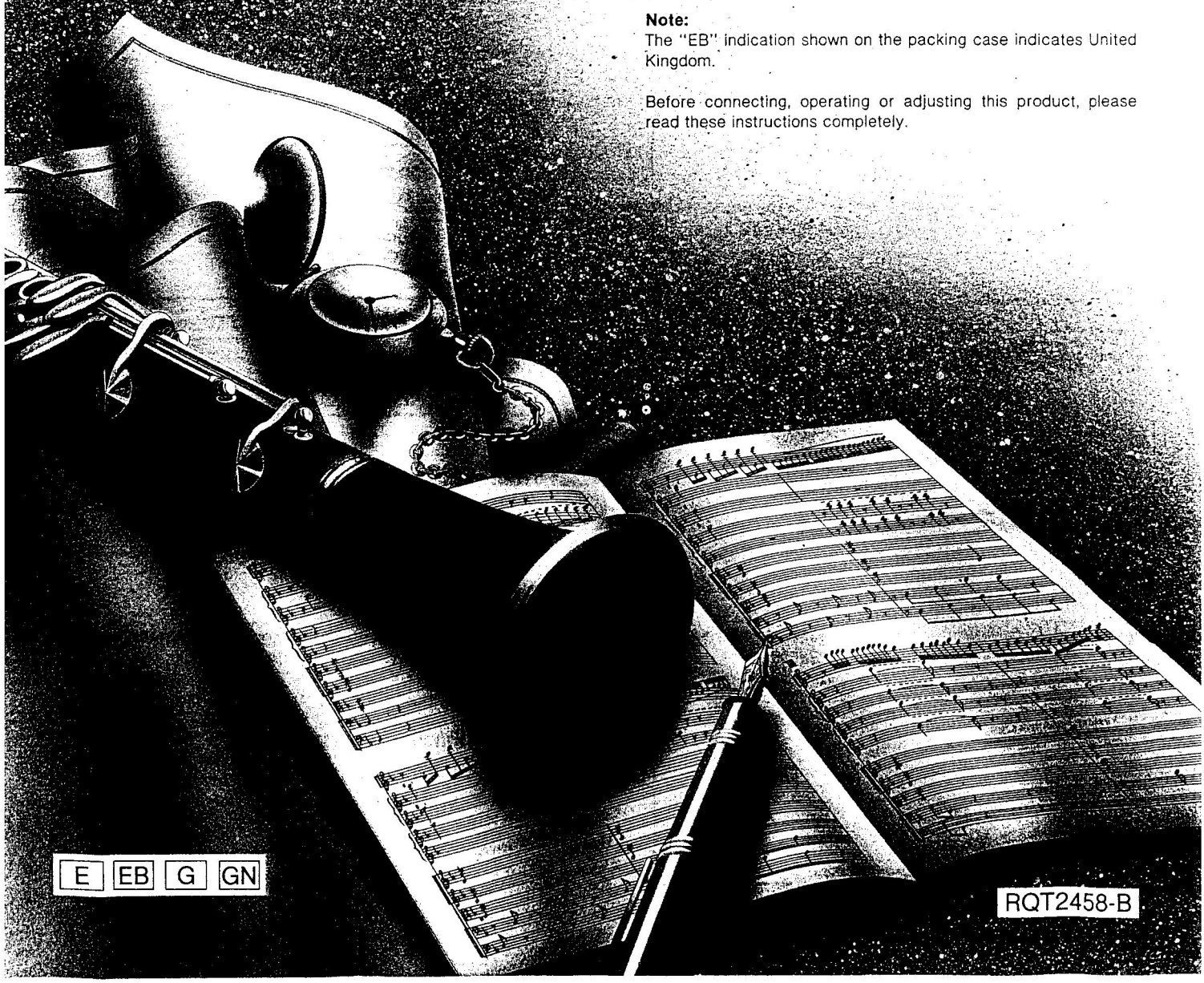
SA-GX170

Operating Instructions



Note:
The "EB" indication shown on the packing case indicates United Kingdom.

Before connecting, operating or adjusting this product, please read these instructions completely.



E EB G GN

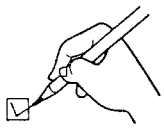
RQT2458-B

Dear Customer

Thank you for purchasing this Technics product.
For optimum performance and safety, please read these instructions carefully.

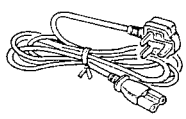
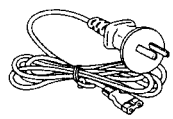
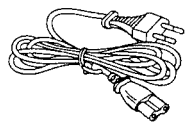
(For areas except United Kingdom, Europe, Australia and N.Z.)

CAUTION:
The AC voltage differs according to the area. Be sure to set the proper voltage in your area before use.
(For details, please refer to the page 6.)

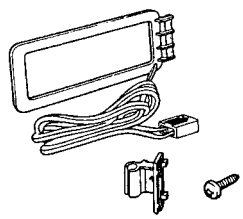


Please check and identify the supplied accessories

☐ AC power supply cord (1)

(For United Kingdom)	**(For Australia and N.Z.)**	**(For others)**
		
(VJA0733)	(RJA0036-K)	(RJA0019-2K)

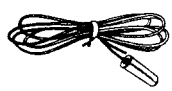
☐ AM loop antenna set (RSA0010)
- AM loop antenna (1)
- AM antenna holder (1)
- Screw (1)



☐ Attachment plug (1) (SJP9009) **(United Kingdom only)**

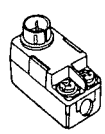
☐ Power plug adaptor (1) (SJP5213-2) (Not supplied for United Kingdom, Europe, Australia and N.Z.)

☐ FM indoor antenna (1) (RSA0007)



☐ Remote control transmitter (1) (RAK-SA113XH)

☐ Antenna plug (1) (RFE0014) (Not supplied for United Kingdom and Europe)



☐ Batteries (2) (UM-4, "AAA", R03)

Table of Contents

Before use

Caution for AC mains lead (For United Kingdom) 3
Suggestions for safety 4
Front panel controls 5

Connections

Equipment connections 6
Antenna connections 8
Speaker connections 10

Listening

Basic operations 11
To adjust the tone quality 12
To adjust the sound balance 12
To mute the sound level 12
When listening through headphones 12
Listening to radio broadcasts 13
Direct access tuning 13
Sequential tuning 14
Preset tuning 14

Recording

Making a recording 16
Tape recording on the tape deck or digital compact cassette (DCC) 16
VCR (VCR 1) recording from an audio source 17
Recording from VCR 2 to VCR 1 17

Using the remote control

Remote control operation 18

Reference

Troubleshooting guide 23
Technical specifications ..... **Back cover**

(For Australia and N.Z.)

THIS TUNER/RECEIVER IS CAPABLE OF RECEIVING THE NEW AM STEREO BROADCASTS FROM THE AM BAND RADIO STATIONS. HOWEVER LIKE MANY TUNERS AND RECEIVERS CURRENTLY AVAILABLE ON THE MARKET IT WILL REPRODUCE THIS AM STEREO SIGNAL ONLY IN AM MONO, WHICH, IN EFFECT, IS OF NO LESSER QUALITY THAN YOUR EXISTING AM MONO TUNER/RECEIVER.

Caution for AC mains lead

(For United Kingdom)

("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.
Check for the ASTA mark ⓐ or the BSI mark ⓚ on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

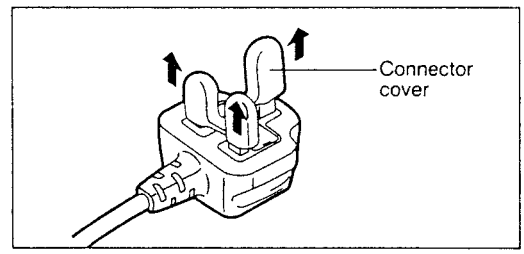
As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol ⏚.

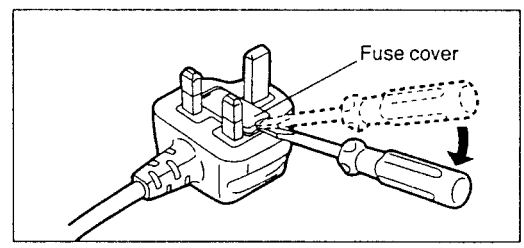
Before use

Remove the connector cover as follows.

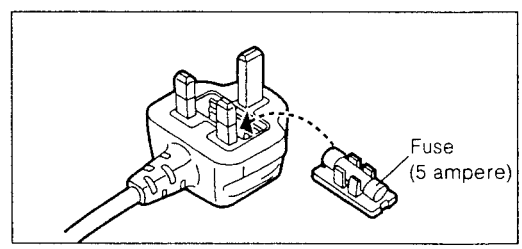


How to replace the fuse

1. Remove the fuse cover with a screwdriver.



2. Replace the fuse and attach the fuse cover.



Suggestions for safety

Placement

Avoid placing the unit in areas of:
- direct sunlight
- high temperature
- high humidity
- excessive vibration
- uneven surfaces. (Place the unit on a flat level surface).

Such conditions might damage the cabinet and/or other component parts and thereby shorten the unit's service life.

Ventilation

- Place the unit in a well ventilated position at least 10 cms away from wall surfaces etc.
- Ensure that curtains and similar materials do not obstruct the ventilation holes.

Stacking

Never place heavy items on top of the unit or the power cord.

Voltage

- It is very dangerous to use an AC power source of high voltage such as for an air conditioner.
  A fire might be caused by such a connection.
- A DC power source can not be used.
  Be sure to check the power source carefully, especially on a ship or other place where DC is used.

Power cord protection

- Avoid cuts, scratches or poor connection of the AC mains cord, as this may result in fire or electric shock hazard.
  Excessive bending, pulling or slicing of the cord should also be avoided.
- Do not pull on the cord when you are disconnecting the power, as this could cause an electric shock. Grasp the plug firmly when you disconnect the power supply.
- Never touch the plug with wet hands or a serious electric shock could result.

Foreign materials

- Ensure that no foreign objects, such as needles, coins, screwdrivers etc, accidentally fall into the unit or through the ventilation holes.
  Otherwise, a serious electric shock or malfunction could occur.
- Be extremely careful about spilling water or liquid on/into the unit, as a fire or electric shock could occur.
  (Disconnect the power plug and contact your dealer immediately if this occurs.)
- Avoid spraying insecticides onto the unit as they contain flammable gases which can be ignited.
- In secticides, alcohol, paint thinner and similar chemicals should never be used to clean the unit as they can cause flaking or cloudiness to the cabinet finish.

Maintenance

Clean the cabinet, panel and controls with a soft cloth lightly moistened with mild detergent solution.

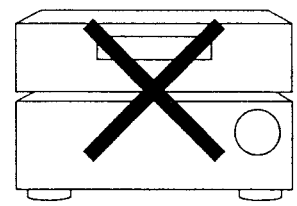
Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

Service

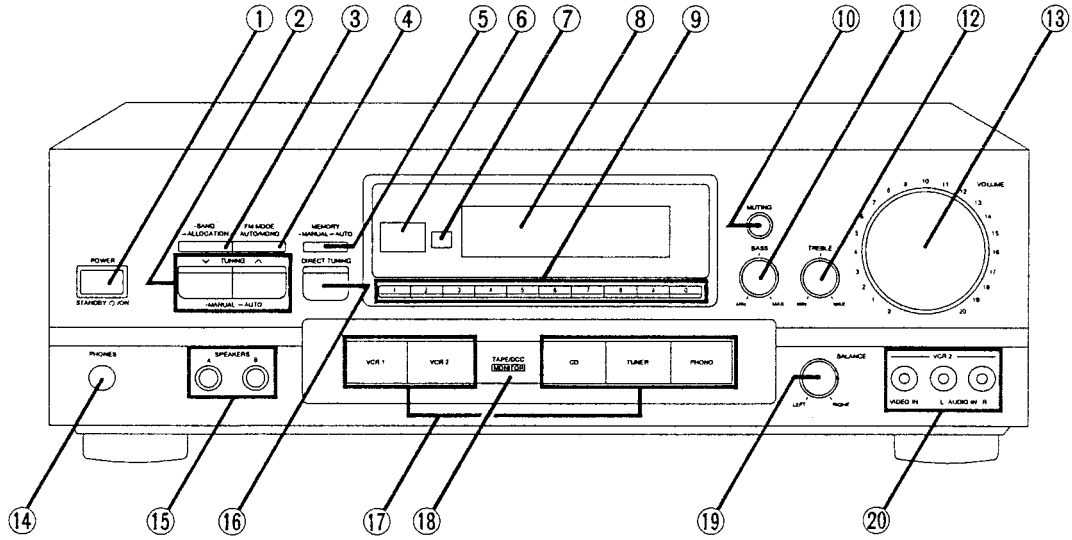
- Never attempt to repair, disassemble or reconstruct the unit if there seems to be a problem.
  A serious electric shock could result if you ignore this precautionary measure.
- If a problem occurs during operation (the sound is interrupted, indicators fail to illuminate, smoke is detected, etc) contact your dealer or Authorized Service Center immediately.
- Disconnect the power supply if the unit will not be used for a long time. Otherwise the operation life could be shortened.

CAUTION

Do not place a tape deck or CD player on top of this unit. Heat radiated from the top of this unit may cause damage to the tape or CD software.



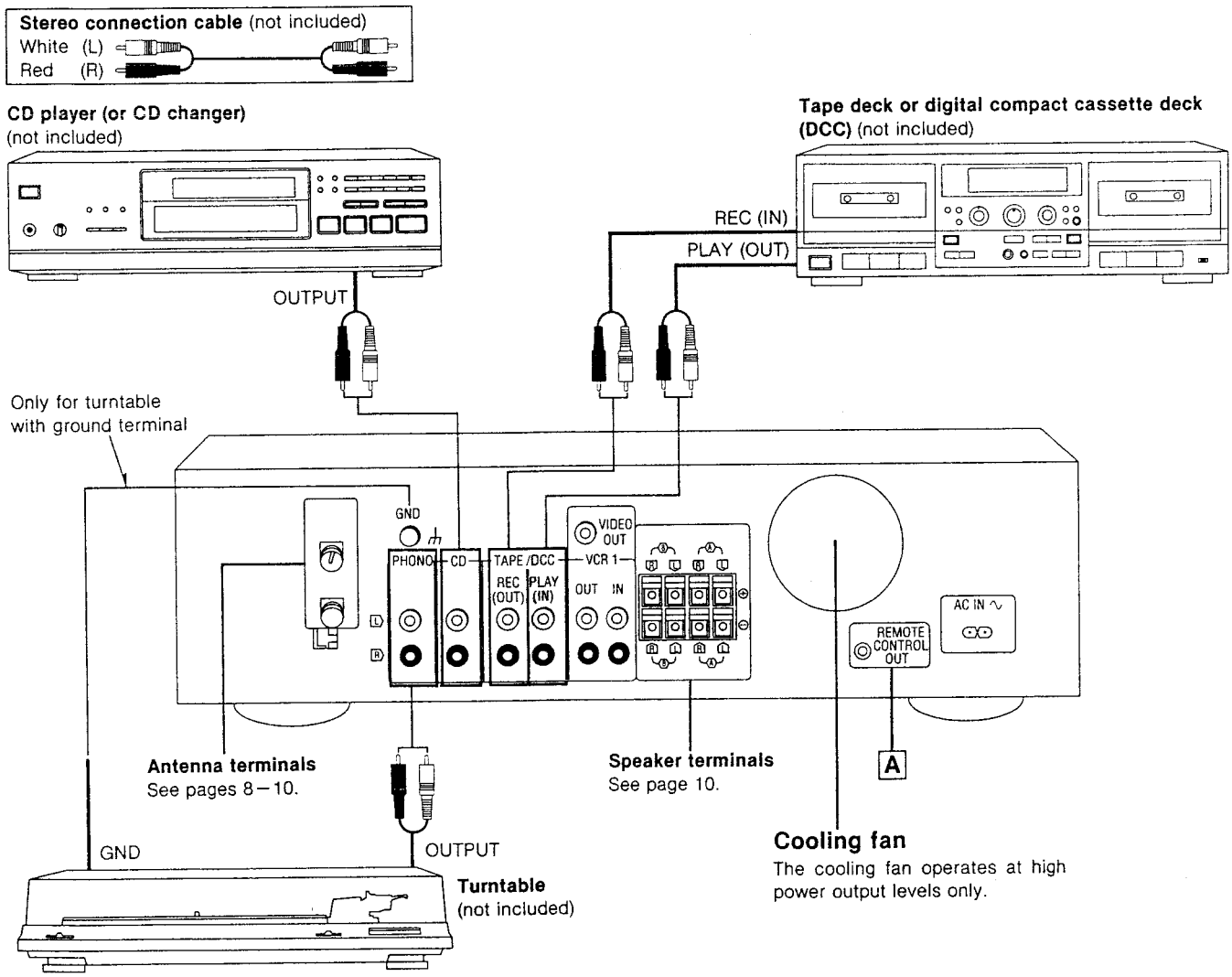
Front panel controls



No.	*Name*	*Ref. page*
①	**Power "STANDBY ⏻ /ON" switch (POWER, STANDBY ⏻ /ON)** Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.	*11*
②	**Tuning buttons (TUNING)**	*14*
③	**Band select button (BAND)**	*13*
④	**FM mode select button (FM MODE)**	*13*
⑤	**Memory button (MEMORY)**	*15*
⑥	**Remote control signal receptor**	*18*
⑦	**"STANDBY" indicator** When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.	–
⑧	**Display**	–
⑨	**Numeric buttons (1 – 0)**	*13,15,16*
⑩	**Muting button (MUTING)**	*12*

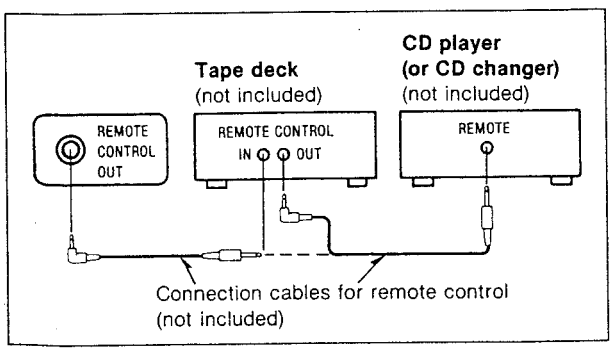
No.	*Name*	*Ref. page*
⑪	**Bass control (BASS)**	*12*
⑫	**Treble control (TREBLE)**	*12*
⑬	**Volume control (VOLUME)**	*11*
⑭	**Headphone jack (PHONES)**	*12*
⑮	**Speaker select buttons (SPEAKERS)**	*11*
⑯	**Direct tuning button (DIRECT TUNING)**	*13*
⑰	**Input select buttons**	*11*
⑱	**Tape/DCC monitor button (TAPE/DCC MONITOR)**	*11,16*
⑲	**Balance control (BALANCE)**	*12*
⑳	**VCR 2 input terminals (VCR 2)**	*17*

Connecting audio equipment



A "REMOTE CONTROL OUT" terminal

Connect the connection cable for the remote control to a Technics tape deck and/or CD player (or CD changer) which has the appropriate remote control terminal as shown below. If a tape deck is not being used, the CD player (or CD changer) can be connected directly (dotted line).



For a CD player (or CD changer) with a remote control sensor the above connection is not necessary.

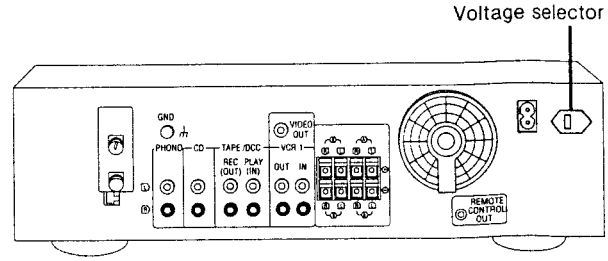
To set the power voltage

(For areas except United Kingdom, Europe, Australia and N.Z.)

Set the voltage selector to the voltage setting for the area in which the unit will be used.

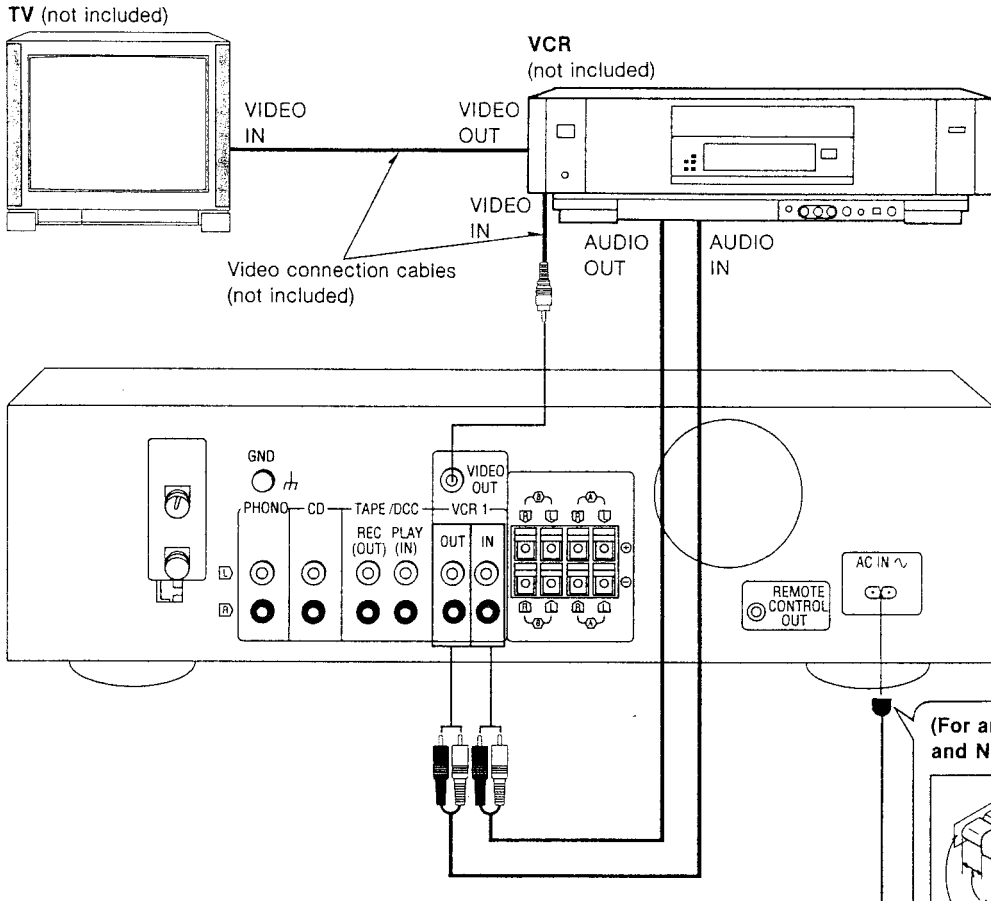
Note

Note that this unit will be seriously damaged if this setting is not made correctly.

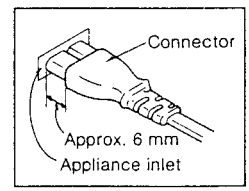


Connecting video equipment

Stereo connection cable (not included)
White (L)
Red (R)



(For areas except Australia and N.Z.)



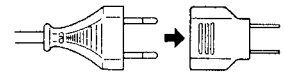
Even when the connector is perfectly inserted, the front part of the connector jut out as shown in the drawing. However there is no problem using the unit.

AC power supply cord (included)

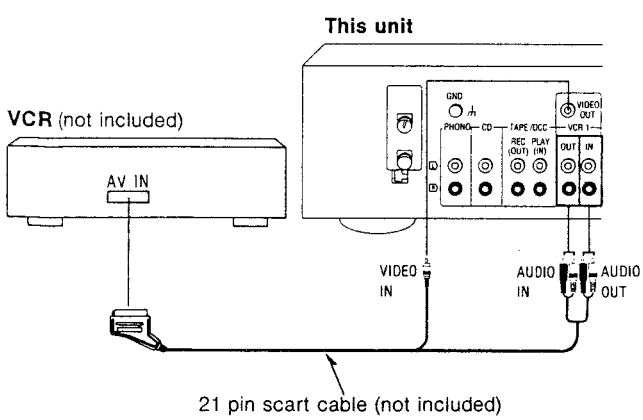
Connect this cord after all other cables and cords are connected.

Household AC outlet

(United Kingdom only)
BE SURE TO READ THE CAUTION FOR THE AC POWER SUPPLY CORD ON PAGE 3 BEFORE CONNECTION.
(For areas except United Kingdom, Europe, Australia and N.Z.)
If the power plug will not fit your socket, use the power plug adaptor (included).



To connect a video deck with 21 pin scart terminal

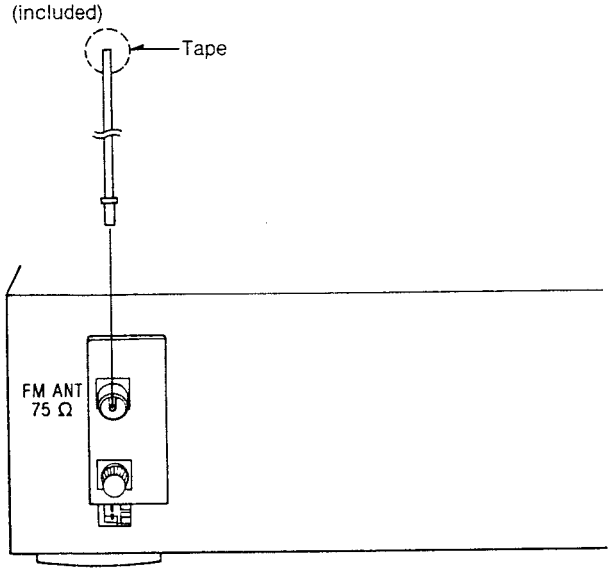


Antenna connections

FM indoor antenna *(included)*

This antenna is normally sufficient for reception of FM broadcasts.

FM indoor antenna
(included)



Attach to a wall (using a tape) facing in the direction of best reception.
For best reception sound quality:
An FM outdoor antenna is recommended.
Disconnect the antenna if an FM outdoor antenna is installed.

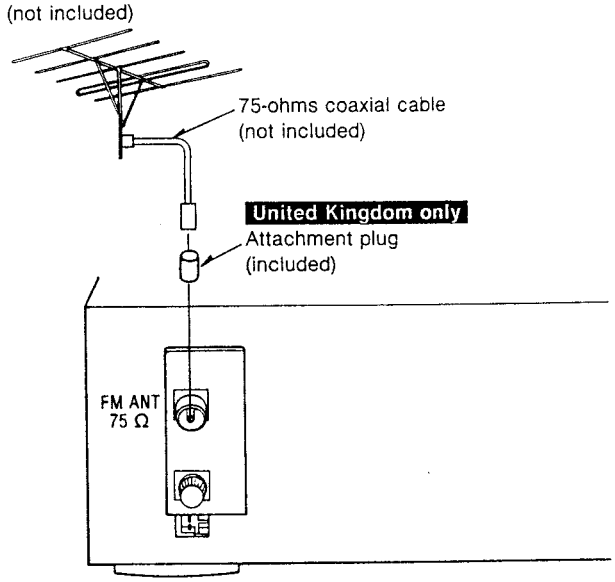
FM outdoor antenna *(not included)*

The outdoor antenna should be used when using the main unit in mountainous areas or in spaces enclosed by reinforced concrete where the FM indoor antenna (included) does not provide satisfactory reception.

Note
An outdoor antenna should be installed by a qualified technician only.

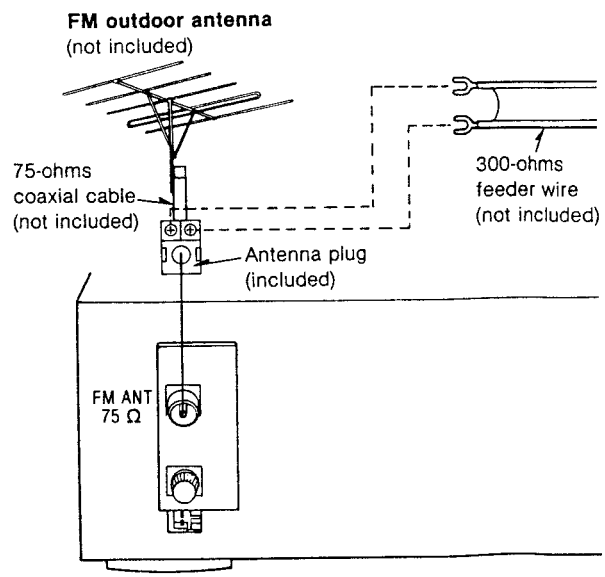
For United Kingdom and Europe

FM outdoor antenna
(not included)



For areas except United Kingdom and Europe

FM outdoor antenna
(not included)



See page 9 for using the antenna plug (included).

■ How to use the antenna plug (included)

(For areas except United Kingdom and Europe)

Two types of wire are most commonly used for connection from the antenna: 300-ohms parallel feeder wire or 75-ohms coaxial cable. For best resistance to outside interference, the use of 75-ohms coaxial cable is suggested.

To connect a 75-ohms coaxial cable

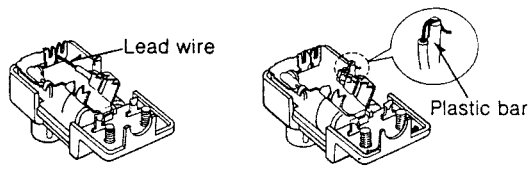
① Remove a piece of the outer vinyl insulator.

② Remove the cover while pulling the tabs.

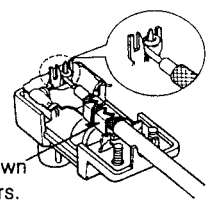
Note

If the tabs are pulled too hard, the casing may be damaged.

③ Remove the lead wire and clamp it with the plastic bar.



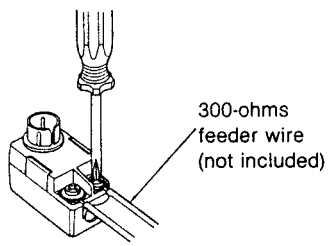
④ Install the coaxial cable.



Clamp the cable conductor, and wind it on so that it doesn't contact anything else.

⑤ Attach the cover.

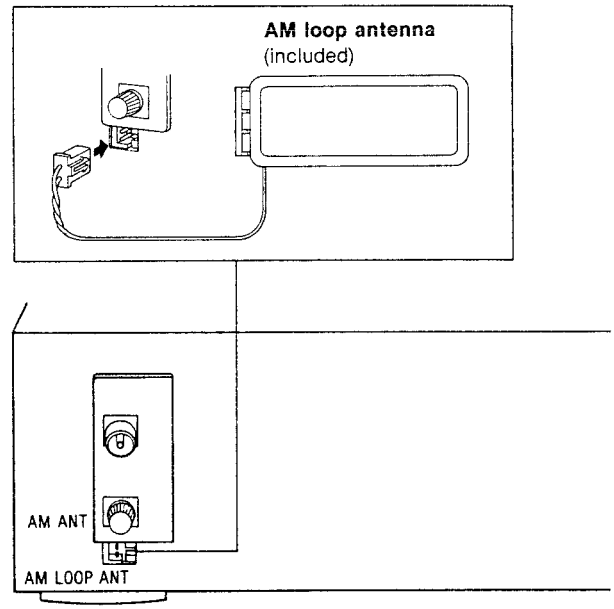
To connect a 300-ohms feeder wire



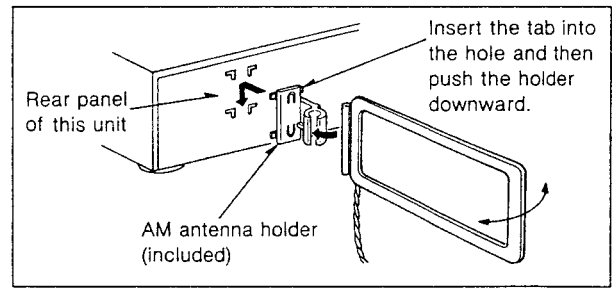
Loosen the screw to connect the feeder wire and tighten it to secure the connection.

AM loop antenna (included)

This antenna is normally sufficient for reception of MW/LW broadcasts.



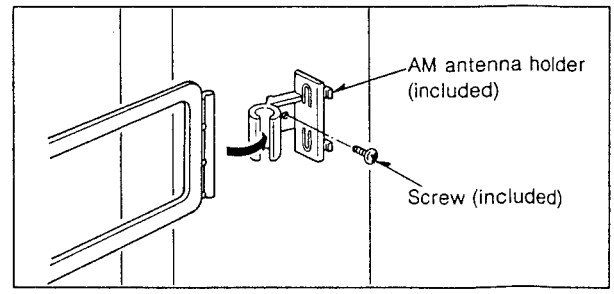
Install the AM antenna holder (included) at the rear panel of this unit and then attach the AM loop antenna to the AM antenna holder (facing in the direction of best reception).



Pay attention to the following points when mounting the antenna.

- Do not mount it horizontally (Doing so will impair reception).
- Do not mount it close to power cords, speaker wires or metal surfaces (Doing so will result in noise).
- Do not mount it close to a tape deck. When the tape deck is being used, chirping or beeping sounds may result.

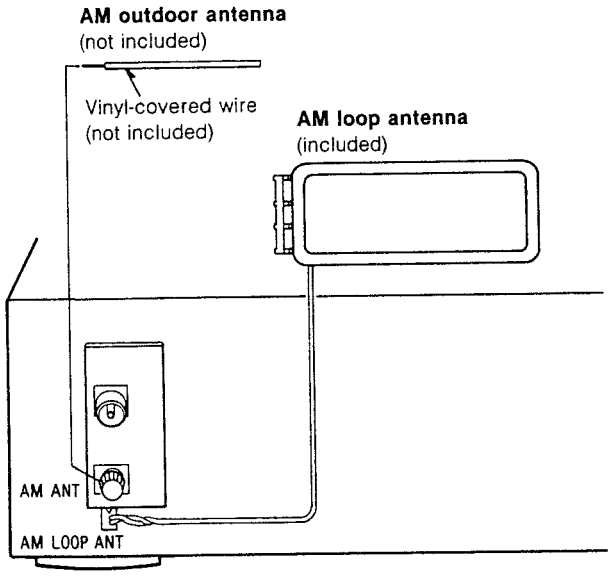
When mounting the antenna to a column, a wall or rack



Antenna connections

AM outdoor antenna *(not included)*

The outdoor antenna should be used when using the main unit in mountainous areas or in spaces enclosed by reinforced concrete where the AM loop antenna (included) does not provide satisfactory reception.



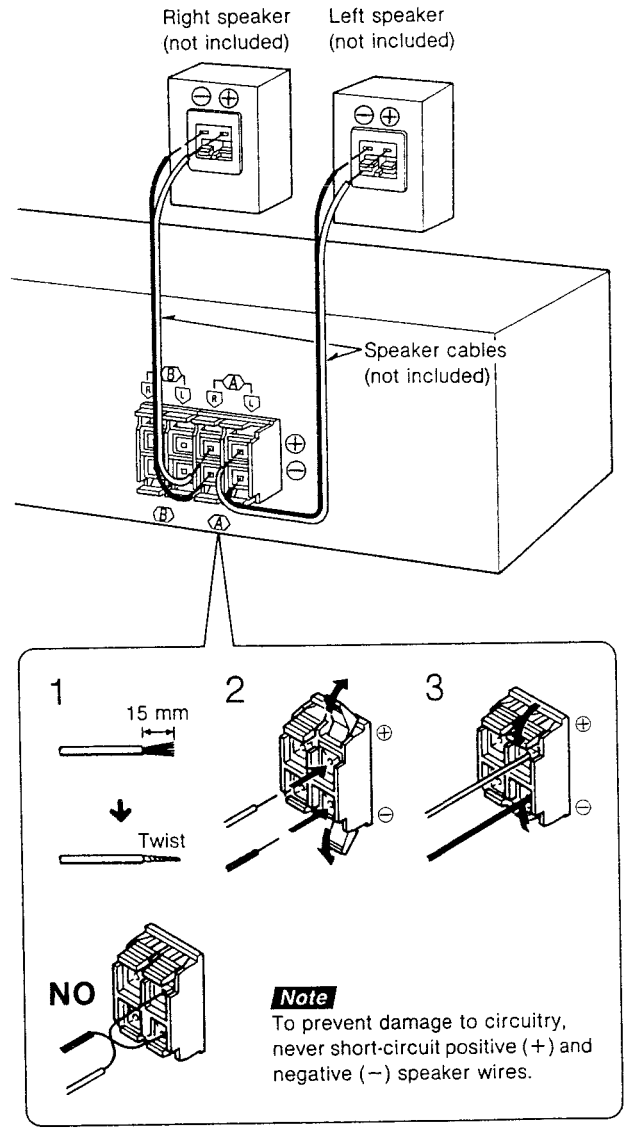
Use 5–12 m (16–40 ft.) of vinyl-covered wire horizontally at the window, or the convenient location.

When the unit is not in use, disconnect the outdoor antenna to prevent possible damage that may be caused by lightning. Never use an outdoor antenna during an electrical storm.

Note

Be sure to connect the AM loop antenna even when an outdoor antenna is used.

Speaker connections



■ "B" terminals

For connection to a second pair of speakers.

■ Speaker impedance

When only the "A" or only the "B" speakers are connected:

(For United Kingdom and Europe)

The impedance of the speaker used with this unit must be 4–16 Ω.

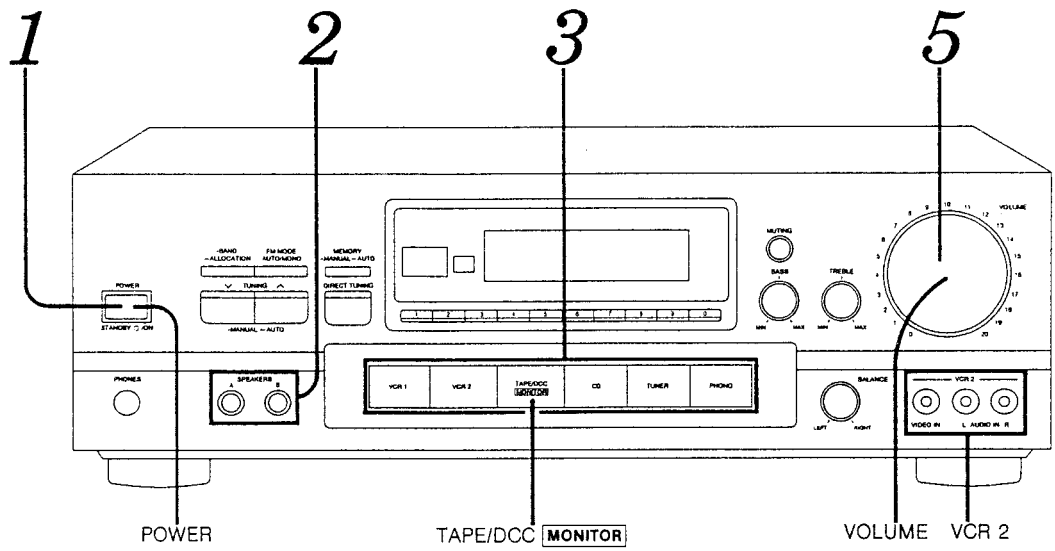
(For others)

The impedance of the speaker used with this unit must be 8–16 Ω.

When both the "A" and the "B" speakers are connected simultaneously:

The impedance of the speaker used with this unit must be 8–16 Ω.

Basic operations



Before operation, set VOLUME to the "0" position.

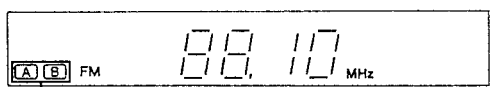
1 POWER

Press POWER to switch on the power.

2 SPEAKERS A B

Press A and/or B to select the speaker system(s) to be used.

A and B refer to the speaker terminals at the rear of the unit.



Illuminates

If the button is pressed once more, the indicator will switch off and no sound will be heard from the speakers.

3 VCR 1 VCR 2 PHONO

Press to select the desired source.

VCR 1: To watch video tapes (VCR 1)
VCR 2: To watch video tapes (VCR 2)
TAPE/DCC: To listen to tape or digital MONITOR compact cassette (DCC) The tape monitor indicator will appear. (See below.)
CD: To listen to compact discs
TUNER: To listen to radio broadcasts
PHONO: To listen to phono discs

4

Start the desired source.

(Refer to the appropriate operating instructions for details.)

5 VOLUME

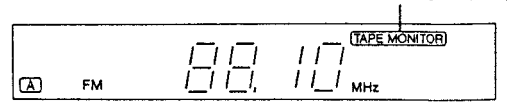
Turn VOLUME to adjust the volume level.

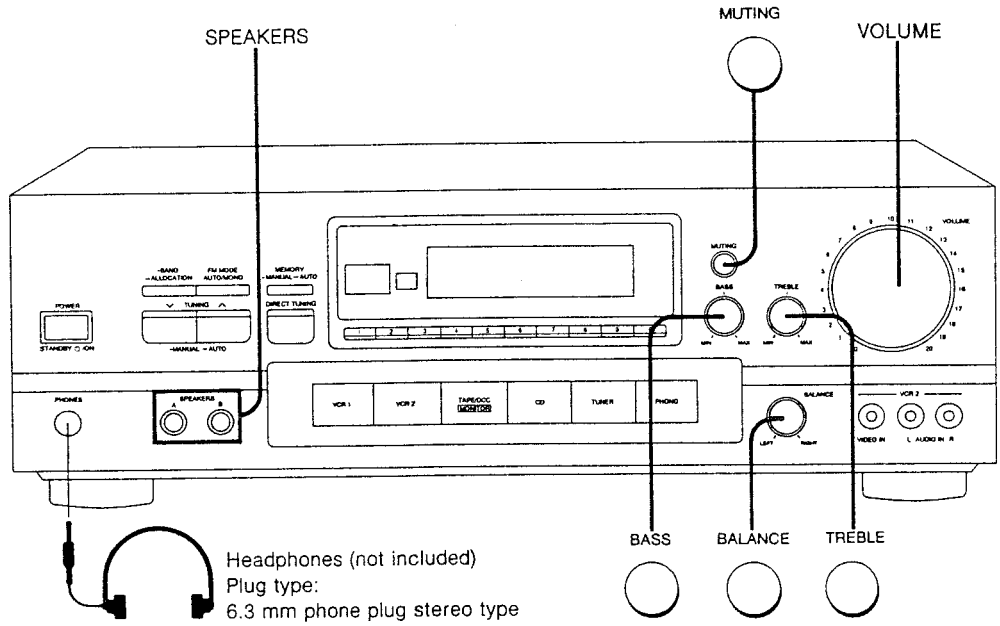
After listening is finished

Be sure to reduce the volume level, and switch the power to the standby condition by pressing POWER.

When tape monitor indicator illuminates or is flashing (approx. 3 seconds)

This indicates that the tape monitor function of this unit is ON. To listen to sources other than a tape or DCC, be sure to turn off the indicator by pressing TAPE/DCC MONITOR.





To adjust the tone quality

BASS

Turn BASS to adjust the low-frequency sound.

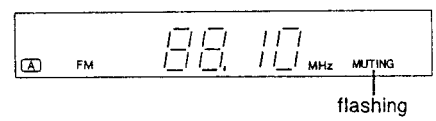
TREBLE

Turn TREBLE to adjust the high-frequency sound.

To mute the sound level

MUTING

Press MUTING.



Press once again to return to the previous volume level. (The muting indicator will turn off.)

To adjust the sound balance

BALANCE

Turn BALANCE to adjust the left/right sound balance.

When listening through headphones

Use VOLUME to reduce the volume level, and connect the headphones.

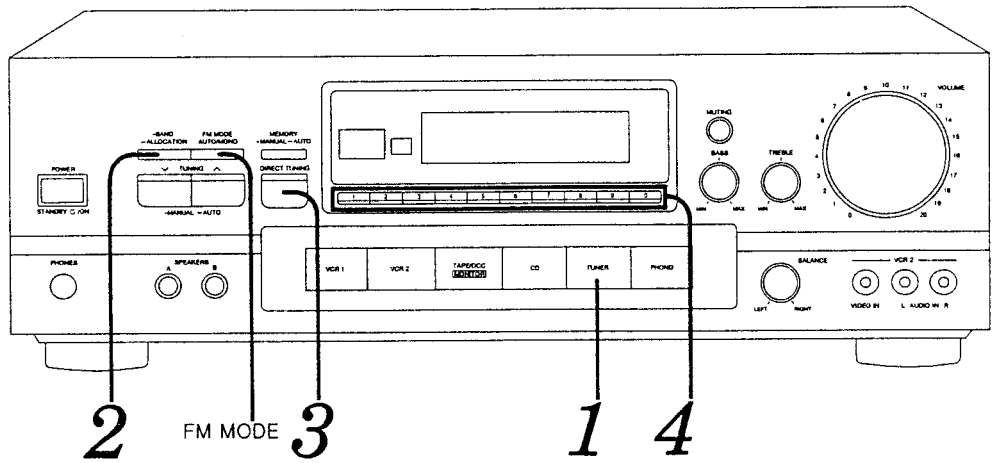
If sound from speakers is not wanted, press SPEAKERS (A) and/or (B) to turn off the speaker select indicators.

Note

Avoid listening for prolonged periods of time to prevent hearing damage.

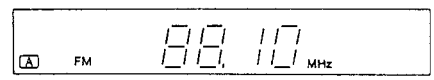
Direct access tuning

Specify the frequency using the numeric buttons to directly tune to the desired broadcast station.



1 TUNER

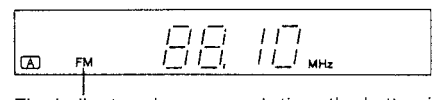
Press TUNER.



2 -BAND —ALLOCATION

Press BAND to select "FM", "MW" or "LW".

The MW frequency step is set to 9 kHz before shipment. To change to 10 kHz step, see below.



The indicator changes each time the button is pressed.

3 DIRECT TUNING

Press DIRECT TUNING.

While cursor display is flashing (approx. 10 seconds)

4 1 2 3 9 0

Press the appropriate numeric buttons to enter the frequency.

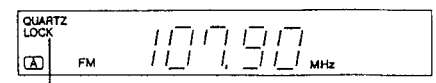
If the frequency has been input correctly, the frequency display will blink.

Note

1. If no button is pressed while the cursor display is flashing, the display will return to the frequency which is currently being received. To re-specify the frequency, repeat the procedure from step 3.
2. If the frequency has not been input correctly, an error message will be displayed. In this case, re-enter the frequency.

If the desired FM frequency is 107.90 MHz

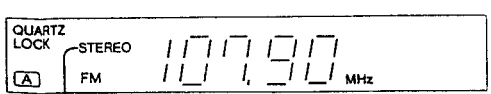
1 → 0 → 7 → 9 → 0



Illuminates when tuned

When the FM stereo broadcast is received:

This unit will automatically switch to FM stereo reception and the FM stereo indicator will illuminate.



Illuminates

If noise is excessive in the FM stereo mode

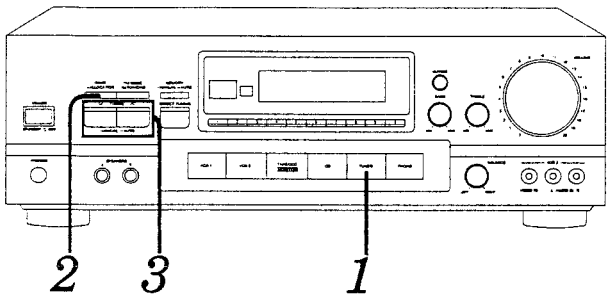
Press FM MODE. (The FM stereo indicator will switch off.)
The broadcast will be monaural, but noise will be reduced. If the button is pressed once more, stereo mode will be resumed.

To change the MW frequency step

Press and hold BAND for about 3 seconds.
(The frequency step changes to 10 kHz per step.)
To return to the previous step, press and hold BAND for about 3 seconds again.

Sequential tuning

If the frequency is not known, use the tuning buttons for searching.



1 TUNER

Press TUNER.

2 -BAND —ALLOCATION

Press BAND to select "FM", "MW" or "LW".

3 ∨ TUNING ∧

Press ∨ or ∧ to tune to the desired broadcast.

If either button is pressed and held down until the frequency begins to change, the broadcast stations can be tuned automatically when a broadcast station is found.

Note

Tuning may stop automatically if any jamming is encountered.

Preset tuning

By presetting the desired broadcast stations into the memory channels of this unit, broadcast stations can be selected simply by pressing numeric button(s). (Refer to page 16 for tuning.)

Before presetting

How many broadcast stations can be preset?

A total of 30 FM, MW and LW stations can be preset.

How is presetting done?

The two following methods are available.

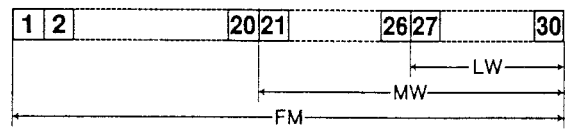
- **Automatic memory presetting**

Automatic memory presetting allows this unit to automatically search for broadcast stations and then preset them into memory.

With this function, searching proceeds from the frequency currently being displayed and continues to highest frequency, and broadcast stations are preset in the order in which they are located.

In this method, the channel ranges that can be preset into the memory for different bands (FM, MW or LW) are set as follows.

Channel



For example, after presetting the FM band, if the MW band is preset, the previous presettings in the sections in the above illustration which overlap will be erased and the subsequent settings will be preset. Therefore, the FM band stations will be kept for channels 1—20 and the MW band stations will be preset to channels 21—30.

- **Manual memory presetting**

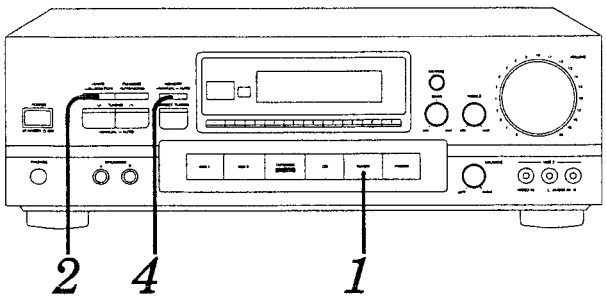
The desired broadcast stations can be preset into the desired channels by the user.

This can also be used as a method for changing selected broadcast stations that were preset in "Automatic memory presetting".

Note

If a new broadcast station is preset into a channel, the setting for the broadcast station which was previously entered in that channel will be automatically erased.

Automatic memory presetting



1 TUNER **Press TUNER.**

2 -BAND —ALLOCATION **Press BAND to select "FM", "MW" or "LW".**

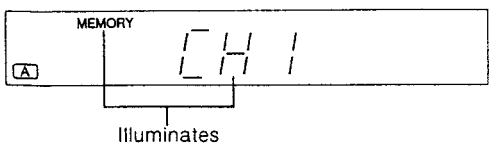
3 **Set to the frequency from which you want to start automatic memory presetting.** (Follow steps 3 and 4 on page 13.)

4 MEMORY **Press MEMORY until the frequency begins to change.**
(Automatic memory presetting will start.)

To stop press MEMORY once again.

When a broadcast station is preset

The memory indicator and the preset channel number will be displayed for approximately 1 second.



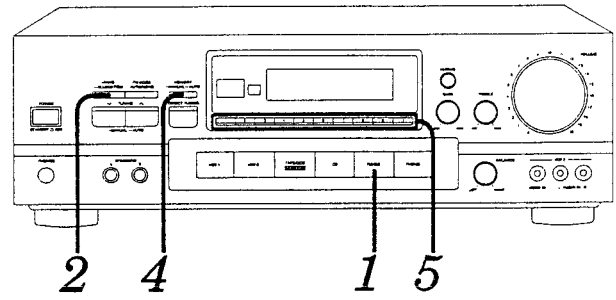
When presetting is completed

The last broadcast station to be preset will be displayed.

Note

Correct presetting may not be possible in cases where the broadcast waves are too strong or too weak. In such cases, carry out presetting manually.

Manual memory presetting



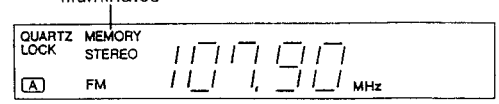
1 TUNER **Press TUNER.**

2 -BAND —ALLOCATION **Press BAND to select "FM", "MW" or "LW".**

3 **Set to the desired broadcast.**
(Follow steps 3 and 4 on page 13 or step 3 on page 14.)
You can also set the stereo mode to the monaural position.

4 MEMORY **Press MEMORY momentarily.**

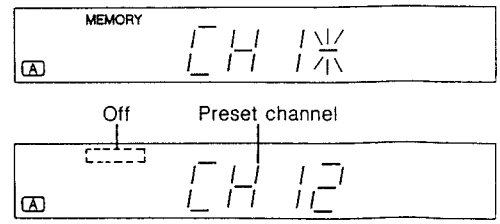
Illuminates



To cancel the memory function, press MEMORY again.

5 1 2 3 9 0 **Specify the desired channel to be preset using the numeric button(s) (completes presetting).**
(Example: Channel 12)

1 → 2 (Within 2 sec.)

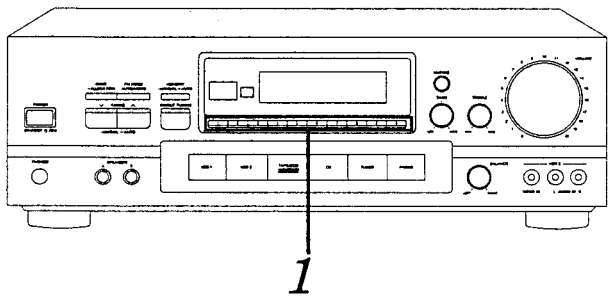


To continue presetting

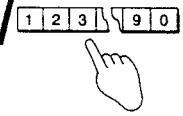
Repeat steps 2 through 5.

Preset tuning *(continued)*

To listen to preset broadcast stations

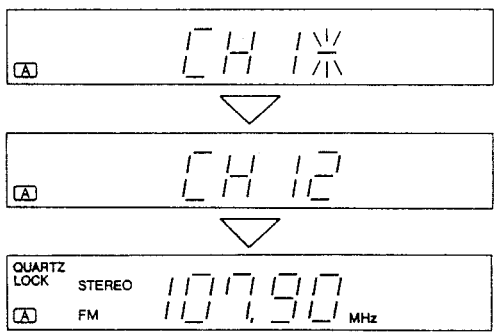


1 **Specify the preset channel using the numeric button(s).**



(Example: Channel 12)

1 → 2 (Within 2 sec.)



To confirm the channel number of the broadcast station being received

Press TUNER.
(The channel number will be displayed for about one second.)

Note

The channel number is not displayed if you change the reception frequency or FM mode setting.

For your reference:

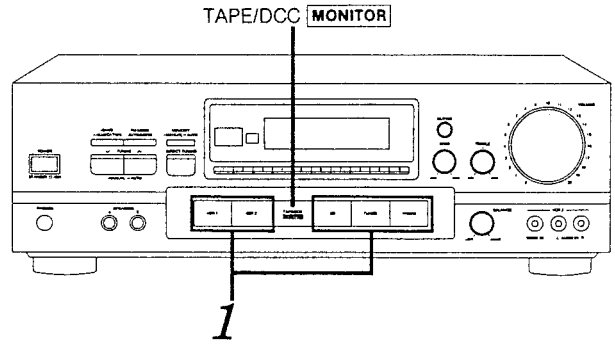
Even if the power is switched to the standby condition or the power cord is disconnected from the household AC outlet, the contents of the memory will continue to be stored for approximately one month.

If frequency presettings are accidentally erased

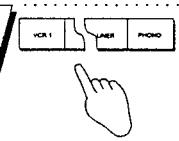
Make the frequency presettings once again.
The power cord should remain connected for one hour or more for the memory back-up to be effective.

Tape recording on the tape deck or digital compact cassette (DCC)

Before recording, prepare the tape deck or DCC for recording (recording level adjustment, etc.).
See the tape deck's or DCC's operating instructions for details.



1 **Select the audio/video source to be recorded.**



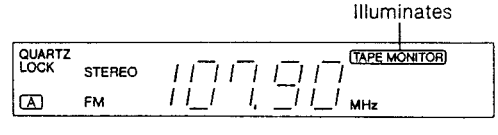
2 **Begin recording.**
Follow your tape deck's or DCC's operating instructions.

3 **Begin the audio/video source to be recorded.**

To check the sound recorded while recording is being made

With a tape deck with 3 heads, it is possible to check the sound recorded on the tape.

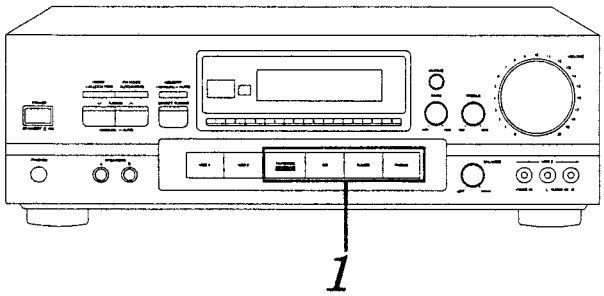
Press TAPE/DCC MONITOR on this unit and set the monitor button on the tape deck to "TAPE".



Press TAPE/DCC MONITOR once again to turn it off.

VCR (VCR 1) recording from an audio source

Before recording, prepare the VCR (VCR1) for recording (recording level adjustment, input selector setting, etc.).
See the VCR's operating instructions for details.



1 **Select the audio source to be recorded.**

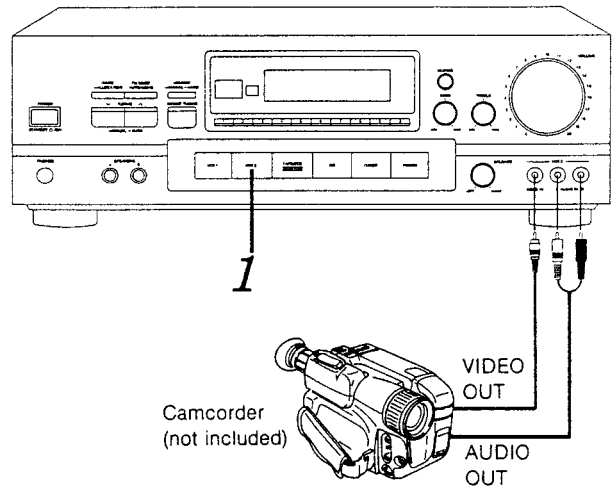
2 **Begin recording on the VCR 1.**

Follow your VCR's operating instructions.

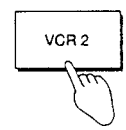
3 **Begin the audio source to be recorded.**

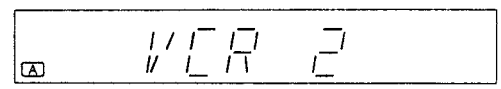
Recording from VCR 2 to VCR 1

It is easier to carry out dubbing from a camcorder if it is connected to the front terminals.
Before recording, prepare the VCR (VCR 1) for recording (recording level adjustment, etc.).
See the VCR's operating instructions for details.



1 **Press VCR 2.**





2 **Begin recording on the VCR 1 and playback the tape on the VCR 2.**

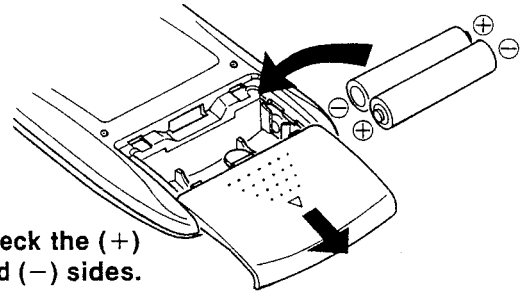
Follow your VCR's operating instructions.

Remote control operation

This remote control transmitter can be used to operate other units manufactured by this company in addition to this receiver, including TVs and VCRs manufactured since 1985, CD players (or CD changers), tape decks and DCC decks.

Battery installation

Insert the batteries included with this unit as shown below.



Check the (+) and (−) sides.

When you need to replace these batteries

Use two UM-4 "AAA", IEC R03 (1.5 V) or equivalent batteries.

Use of batteries

Do not mix old and new batteries, or batteries of different types (carbon and alkaline, etc.).

Always remove old, weak or worn-out batteries promptly and dispose of them properly.

The battery life is about one year.
Although the battery life varies depending on how often the device is used, the batteries should be replaced about once every year on the average.

The batteries should be replaced if commands from the remote control transmitter do not operate the unit even when transmitter is held close to the front panel.

Never subject batteries to excessive heat or flame; do not attempt to disassemble them; and be sure they are not short-circuited.

If the remote control is not to be used for a long period of time, remove the batteries and store them in a cool, dark place.

If a battery leaks, remove all batteries and dispose of them properly. Thoroughly clean the battery compartment before inserting new batteries.
If the electrolyte comes into contact with skin or clothes, flush with water immediately.

Keep batteries out of reach of children.

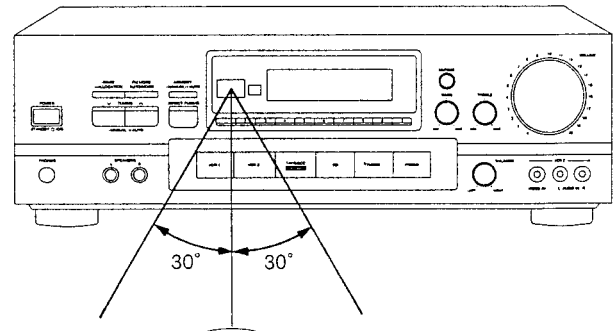
Do not use rechargeable (nickel-cadmium) type batteries.

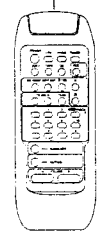
Do not attempt to recharge alkaline or carbon batteries.

- For detailed information concerning operation steps, etc., please refer to the appropriate page for each unit and the respective operating instructions.
- Make sure that the power of each unit is set to the "ON" position, before beginning the operations.

Method for use

Use the remote control within 60 degrees and within 7 meters facing directly toward the receiver's remote control signal receptor.

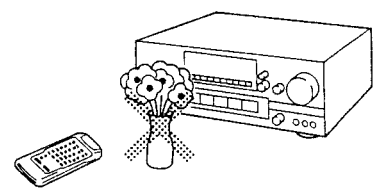




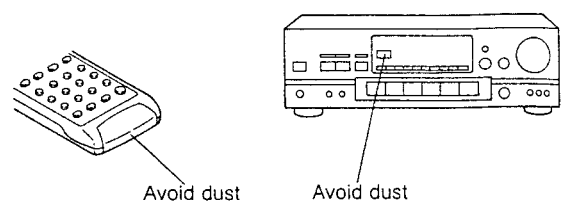
About 7 meters in front of the sensor
(The actual range will depend on the angle at which the remote control is used.)

When operating a TV, VCR, digital compact cassette deck (DCC) or a CD player (or CD changer) with a remote control sensor, face this remote control toward the remote control sensor of the unit to be operated.

Operation notes



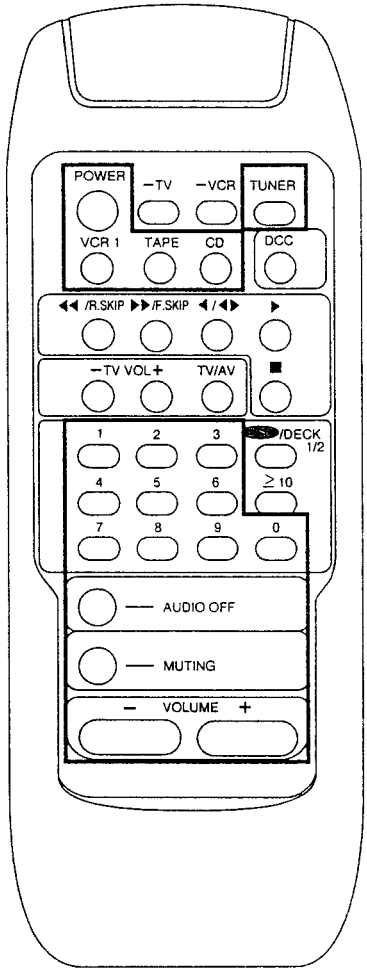
Aim the remote control's transmission window toward the unit's sensor. Avoid any obstacles.



Be sure the transmission window and the unit's sensor are free from dust. Excessive dust might affect performance.

The operation may not be correct if direct sunlight or another strong light source strikes the receiving sensor of this unit. If there is a problem, place the unit away from the light source.

To operate the receiver



Basic operations

To turn the unit ON/OFF	POWER ○
To turn the tape monitor function ON	TAPE ○ To turn off the tape monitor function, press one of the input select buttons (TUNER, CD, VCR 1).
To select an input source	TUNER ▭ CD ○ VCR 1 ○
To mute the sound level	○ — MUTING Press once more to return to the original volume.
To adjust the volume level	– VOLUME + ▭ ▭
If your unit is equipped with the New Technics Remote Control System (see below)	
To turn the system OFF	○ — AUDIO OFF

To listen to radio broadcasts

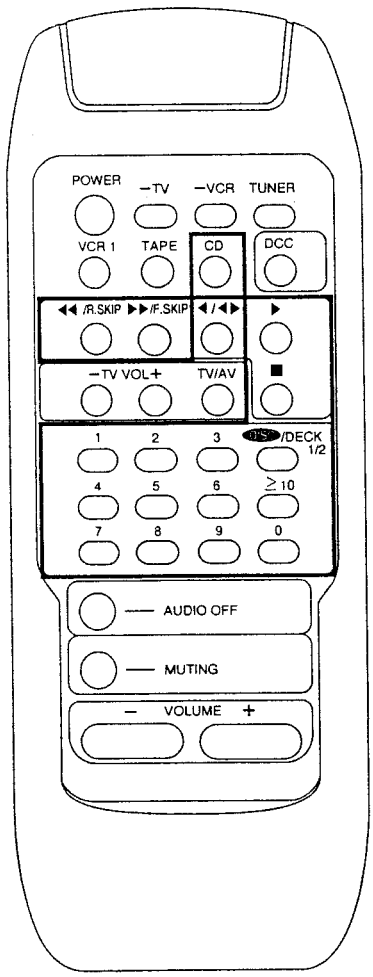
TUNER ▭ → 1 2 3 / 4 5 6 / 7 8 9 0

Specify the preset channel using the numeric button(s).

(Example: Channel 12)
1 → 2
Within 2 sec.

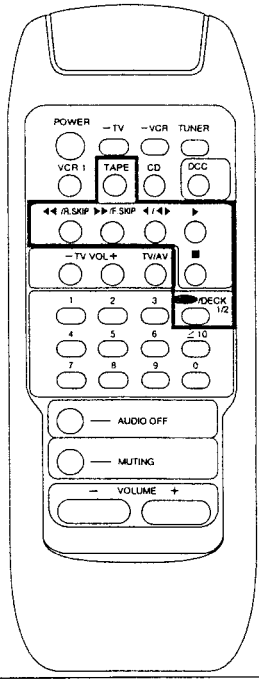
New Technics Remote Control System Compatibility Table (as of April, 1994)	
CD player (or CD changer)	SL-PG360A, SL-PG460A, SL-PG560A, SL-PD667, SL-PD867, SL-PD1000
Cassette deck	RS-BX501, RS-BX601, RS-BX701, RS-BX646, RS-BX747, RS-TR373, RS-TR474, RS-TR575
Digital compact cassette deck (DCC)	RS-DC8

To operate a CD player (or CD changer)



To switch the remote control transmitter to CD operation mode	CD ○ The input source for the receiver will switch to the CD player and operation of the buttons listed below will be possible. **If a CD player or CD changer which is equipped with the New Technics Remote Control System is connected** The power supply of the CD player or CD changer can be turned on by pressing this button for approximately 2 seconds.
To start play	▶ ○
To start play from the desired track	(only for a CD changer) DISC → 1 2 3 4 5 Select the desired disc. 1 2 3 4 5 6 ≥10 7 8 9 0 Select the track number. (Example: Track 9) 9 (Example: Track 12) ≥10 → 1 → 2 **When a CD changer (or CD player) is connected to this unit by using the connection cable for the remote control:** Select a two-digit track number by pressing ▶▶/F.SKIP.
To skip a track	◀◀ /R.SKIP ○ (Backward) ▶▶/F.SKIP ○ (Forward)
To stop play	■ ○

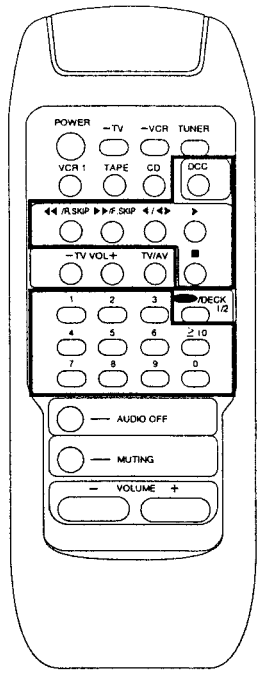
To operate a cassette deck



To switch the remote control to cassette deck operation mode	TAPE ○ The input source for the receiver will switch to the cassette deck which is connected to the "TAPE/DCC" terminals, and operation of the buttons listed below will be possible. **If a cassette deck which is equipped with the New Technics Remote Control System is connected** The power supply of the cassette deck can be turned on by pressing TAPE for approximately 2 seconds.
(Only when using a double cassette deck) **Select the tape deck (DECK 1/DECK 2)**	DISC /DECK 1/2 ○ The remote control indicator of the cassette deck will change each time the button is pressed.
To start play	◀ / ◀▶ ○ (Reverse) ▶ ○ (Forward)
To fast-forward or rewind the tape	◀◀ /R.SKIP ▶▶/F.SKIP ○ ○ When using a Technics cassette deck equipped with a TPS function, the start of a track can be found by performing this operation during playback.
To stop play	■ ○

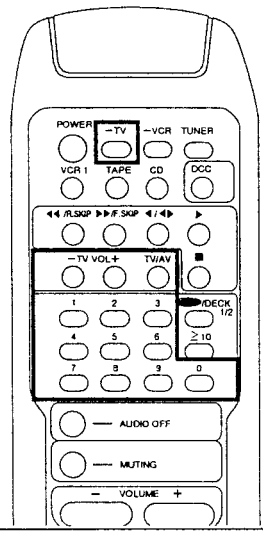
To operate a digital compact cassette deck (DCC)

Note The Technics RS-DC10 can not be operated by this remote control.



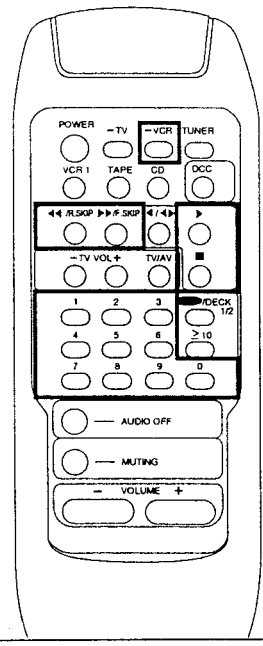
To switch the remote control transmitter to DCC operation mode	DCC ○ The remote control will switch to DCC operation mode, and operation of the buttons listed below will be possible. **If a DCC deck which is equipped with the New Technics Remote Control System is connected** The power supply of the DCC deck can be turned on by pressing this button for approximately 2 seconds.
To start play	▶ ○
To select by track number	This is only effective for commercially-available DCC tapes and for other DCC tapes for recording purposes which have had track numbers recorded. 1 2 3 4 5 6 ≥10 7 8 9 0 (Example: Track 9) 9 (Example: Track 12) ≥10 → 1 → 2 After the desired track has been searched for, the unit will return to the condition before the button was pressed (playing back, stopped or paused).
To change the tape side	◀ / ◀▶ ○
To skip a track	◀◀ /R.SKIP ○ (Backward) ▶▶/F.SKIP ○ (Forward)
To stop play	■ ○

To operate a TV



To turn the unit ON/OFF	–TV Press for approx. 2 seconds. When the unit is turned on, the remote control will switch to TV operation mode, and operation of the buttons listed below will be possible.
To select the TV/VIDEO mode	TV/AV The TV screen will change each time the button is pressed.
To select the desired channel	1 2 3 4 5 6 7 8 9 0 (Example: Channel 9) 9 (Example: Channel 12) 1 ➡ 2
To adjust the volume level	–TV VOL+

To operate a VCR



To turn the unit ON/OFF	–VCR Press for approx. 2 seconds. When the unit is turned on, the remote control will switch to VCR operation mode, and operation of the buttons listed below will be possible.
To start play	▶
To select the desired channel.	1 2 3 4 5 6 7 8 9 0 (Example: Channel 9) 9 (Example: Channel 12) 1 ➡ 2
To fast-forward or rewind the tape	In the stop mode ◀◀ /R.SKIP ▶▶ /F.SKIP
To stop play	■

Note

If you operate a TV, VCR or CD player (or CD changer) using this remote control, the unit may fail to operate due to the differing nature of the remote control signal.

If the remote control fails to operate:

It is necessary to switch over the signal within the remote control by following this simple procedure.

For CD player (or CD changer) operation

POWER CD Press POWER and CD simultaneously, hold for 2 seconds.

For TV operation

POWER –TV Press POWER and TV simultaneously, hold for 2 seconds.

For VCR operation

POWER –VCR Press POWER and VCR simultaneously, hold for 2 seconds.

To restore the previous memory contents, carry out the same operations one more time.

Depending on the model, there may be cases where operation is still not possible even if the remote control signal is switched over due to differences in frequency range characteristics.

Troubleshooting guide

Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation.

If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, refer to the directory of Authorized Service Centers (enclosed with this unit) to locate a convenient service center, or consult your Technics dealer for instructions.

Problem	Probable cause(s)	Suggested remedy
While listening to FM broadcasts		
An unusual hissing noise is heard when listening to the broadcast in stereo, but not heard when listening monaurally.	A slight noise may be heard because the method used for modulation of FM stereo broadcasts is different than that used for monaural broadcasts.	• Try reducing the treble sound by using the treble control. • Try changing the location, height and/or direction of the antenna. • If an indoor antenna is being used, change to an outdoor antenna. • Try using an antenna with more elements.
Noise is excessive in both stereo and monaural broadcasts.	Poor location and/or direction of the antenna.	
	Transmitting station is too far away.	
The FM stereo indicator or the quartz lock indicator flickers, without completely illuminating.	Poor location and/or direction of the antenna.	• Try changing the location, height and/or direction of the antenna. • If an indoor antenna is being used, change to an outdoor antenna. • Try using an antenna with more elements.
	Transmitting station is too far away.	
Excessive distortion in the sound of stereo broadcasts.	Nearby building or mountain.	
While listening to AM broadcasts		
An unusual "beat" sound is heard.	Unit is being used at the same time as the television set.	• Turn off the television set, or use this unit farther away from it.
	Interference from an adjacent broadcast signal.	• Try reducing the treble sound by using the treble control.
A low-pitched "hum" sound is heard when the broadcast is tuned.	The AM loop antenna connection wires are too close to the power cord.	• Place the antenna connection wires and the power cord farther apart.
	The power supply frequency from the power cord is modulated and heard from the speakers.	• Install a special outdoor antenna.
A strange hissing noise is produced continuously or intermittently.	Caused by the "discharge phenomenon" and the "oscillation phenomenon" of electric appliances (such as fluorescent lights, TV, small series-type motors, rectification equipment, etc.).	• Try placing this unit farther away from such equipment. • Install noise-prevention equipment on this unit or on the electric appliance.
Problems noted at all times		
Power will not switch ON.	The power cord plug is not completely inserted.	• Confirm that the power cord plug is connected completely.
No sound is heard.	Both A and B speakers are turnd OFF.	• Select the input select button for the source to which you wish to listen and press it one or two times. (The display will scroll through the causes of the problem.) Use this display as a guide to remedy the problem.
	The tape monitor function is ON.	
	The muting function is ON.	
	Connections are incomplete or incorrect to the speaker systems, etc.	• Check to be sure that all connection wires are correctly connected.
	The incorrect input selector has been pressed.	• Check to be sure that the correct selector is pressed.
Sound stops during a performance, or no sound is heard when the power is switched ON. (The word "OVERLOAD" appears on the display.)	The protection circuitry has functioned because the positive and negative speaker connection wires are "shorted", speaker systems with an impedance less than the indicated rated impedance of this unit are used or under severe use, such as loud volume, excessive power and in an excessively hot environment.	• Switch off the power, and after determining and correcting the cause, switch on the power once again. • Use a speaker system of the proper impedance rating.

Technical specifications (DIN 45 500)

■ AMPLIFIER SECTION

Power output	
DIN 1 kHz (T.H.D. 1%)	
(at 240 V for United Kingdom and Europe)	2 × 80 W (4 Ω)
(for others)	2 × 80 W (8 Ω)
40 Hz – 20 kHz continuous power output	
both channels driven	2 × 60 W (8 Ω)
Total harmonic distortion	
rated power at 40 Hz – 20 kHz	0.5% (8 Ω)
half power at 1 kHz	0.03% (8 Ω)
Intermodulation distortion	
rated power at 60 Hz: 7 kHz = 4:1, SMPTE	0.5% (8 Ω)
Power bandwidth	
both channels driven, −3 dB	10 Hz – 40 kHz (8 Ω)
Damping factor	40 (8 Ω)
Input sensitivity and impedance	
PHONO	3 mV/47 kΩ
CD, VCR 1, VCR 2, TAPE/DCC	200 mV/22 kΩ
S/N at rated power (8 Ω)	
PHONO	70 dB (IHF, A: 80 dB)
CD, VCR 1, VCR 2, TAPE/DCC	80 dB (IHF, A: 90 dB)
Frequency response	
PHONO	RIAA standard curve (30 Hz – 15 kHz) ±0.8 dB
CD, VCR 1, VCR 2, TAPE/DCC	10 Hz – 40 kHz, ±3 dB
Tone controls	
BASS	50 Hz, +10 to −10 dB
TREBLE	20 kHz, +10 to −10 dB
Output voltage	
VCR 1 OUT, TAPE/DCC REC (OUT)	200 mV
Channel balance (250 Hz – 6.3 kHz)	±1 dB
Channel separation	55 dB
Headphones output level and impedance	430 mV/330 Ω
Load impedance	
A or B (For United Kingdom and Europe)	4 – 16 Ω
(For others)	8 – 16 Ω
A and B	8 – 16 Ω

■ FM TUNER SECTION

Frequency range	87.50 – 108.00 MHz
Sensitivity	
S/N 30 dB	1.5 μV/75 Ω
S/N 26 dB	1.3 μV/75 Ω
S/N 20 dB	1.2 μV/75 Ω
IHF usable sensitivity	(IHF '58) 1.5 μV/75 Ω
IHF 46 dB stereo quieting sensitivity	22 μV/75 Ω
Total harmonic distortion	
MONO	0.2%
STEREO	0.3%
S/N	
MONO	60 dB (75 dB, IHF)
STEREO	58 dB (71 dB, IHF)
Frequency response	20 Hz – 15 kHz, +1 dB, −2 dB
Alternate channel selectivity	
±400 kHz	65 dB
Capture ratio	1.0 dB
Image rejection at 98 MHz	40 dB
IF rejection at 98 MHz	70 dB
Spurious response rejection at 98 MHz	70 dB
AM suppression	50 dB
Stereo separation	
1 kHz	40 dB
Carrier leak	
19 kHz	−30 dB (−35 dB, IHF)
38 kHz	−50 dB (−55 dB, IHF)
Channel balance (250 Hz – 6.3 kHz)	±1.5 dB
Limiting point	1.2 μV
Bandwidth	
IF amplifier	180 kHz
FM demodulator	1000 kHz
Antenna terminal(s)	75 Ω (unbalanced)

■ AM TUNER SECTION

Frequency range	
MW	522 – 1611 kHz (9 kHz steps) 530 – 1620 kHz (10 kHz steps)
LW	144 – 288 kHz
Sensitivity	
MW	20 μV, 330 μV/m
LW	45 μV
Selectivity	
MW (at 999 kHz)	55 dB
LW (at 252 kHz)	55 dB
Image rejection	
MW (at 999 kHz)	40 dB
LW (at 252 kHz)	40 dB
IF rejection	
MW (at 999 kHz)	55 dB
LW (at 252 kHz)	55 dB

■ GENERAL

Power consumption	
(For United Kingdom and Europe)	160 W
(For others)	150 W
Power supply	
(For United Kingdom, Europe, Australia and N.Z.)	AC 50/60 Hz, 230 – 240 V
(For others)	AC 50/60 Hz, 110 – 127 V/220 – 240 V
Dimensions (W × H × D)	430 × 136 × 305 mm
Weight	6.6 kg

Notes:

1. Specifications are subject to change without notice. Weight and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

For United Kingdom only

This apparatus was produced to BS 800.

Matsushita Electric Industrial Co., Ltd.
Central P.O. Box 288, Osaka 530-91, Japan

RQT2458-B
Printed in Japan
H0494C0